

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter, on the Commission's own motion,)
to open a docket that will be used to collaboratively)
consider issues related to both the deployment of)
plug-in electric vehicle charging facilities and to)
examine issues germane to the use of compressed)
natural gas as a motor vehicle transportation fuel in)
Michigan in a Commission sponsored technical)
conference.)
_____)

Case No. U-18368

At the April 28, 2017 meeting of the Michigan Public Service Commission in Lansing,
Michigan.

PRESENT: Hon. Sally A. Talberg, Chairman
 Hon. Norman J. Saari, Commissioner
 Hon. Rachael A. Eubanks, Commissioner

ORDER COMMENCING A COLLABORATIVE TECHNICAL CONFERENCE

In its February 28, 2017 order in Case No. U-17990 (February 28 order), the most recently concluded electric general rate case proceeding for Consumers Energy Company (Consumers), the Commission indicated its intention to sponsor a technical conference on plug-in electric vehicles (PEV). February 28 order, p. 49. Initially, the issue had been raised by Consumers in the context of a proposal by the utility to add \$10.625 million to the utility's rate base "to install 30 fast chargers and 750 charging stations. Additionally, the company proposed to offer a \$1,000 incentive to its electric customers who purchase a PEV and install an at-home charging station, capped at 2,500 rebates." February 28 order, p. 43. Ultimately, Consumers withdrew its PEV

proposal when it filed exceptions in Case No. U-17990, but in doing so the utility indicated that it would be willing to participate in a future collaborative on PEV-related issues in Michigan.

Other parties to Case No. U-17990 also supported a more collaborative approach to the consideration of PEV-related issues. The Commission Staff (Staff) recommended involving both utilities and third-party suppliers of charging equipment in the discussion. The Staff also suggested a collaborative workgroup formed from former Michigan Electric Vehicle (MEV) workgroup stakeholders, which included automotive manufacturers, charging station network operators, the Michigan Department of Transportation, and local government representatives.

ChargePoint, Inc. (ChargePoint), which is a manufacturer of both public and home PEV charging stations, opposed Consumers' recovery of capital expenditures associated with public charging stations out of concern that utility-owned charging infrastructure would stymie competition in the market and increase investment risk. Nevertheless, ChargePoint supported creation of an MEV collaborative that would address the future of utility-based PEV programs in the state.

Michigan Environmental Council, Natural Resources Defense Council, and Sierra Club (together, MEC/NRDC/SC) also supported a collaborative stakeholder process to address the development of PEV infrastructure in Michigan, which they believed would enable utilities to communicate with their customers about the benefits of electric vehicles and the availability of charging infrastructure.

In his proposal for decision, Administrative Law Judge Dennis W. Mack (ALJ) recommended that the Commission establish a collaborative that includes all stakeholders in the electric vehicle (EV) market for the purpose of assisting in the development of a master plan for Michigan's

electric vehicle charging network. The Commission preferred the use of a technical conference to engage stakeholders on this topic. The Commission stated:

The Commission agrees that significant PEV charging issues were raised in this case and that emerging PEV charging technology will need further study and review to inform any future collaborative. Therefore, as an initial step, the Commission will host a technical conference inviting various stakeholders, including utilities, auto manufacturers, third-party suppliers of charging equipment, transportation planners and other parties that are not formal market participants, yet have significant expertise in PEV technology, to discuss issues associated with the deployment of PEV charging. The discussions will address both public charging stations and at-home and business deployment of PEV infrastructure. The Commission will address PEV issues on a statewide basis and not limit discussion to Consumers' service territory. Issues for discussion will include, but are not limited to, charger technology and deployment, electric rate structure for these devices, installing and maintaining charging systems, time of day usage, and electric load balancing concerning the impact of PEV charging on grid resources. Therefore, on its own motion, the Commission will issue an order in a separate docket for the purpose of initiating the PEV technical conference.

February 28 order, pp. 48-49.

Accordingly, the Commission has opened this docket to announce the beginning of the effort to collaboratively address PEV issues through a technical conference discussed in its February 28 order in Case No. U-17990. In addition to addressing PEV issues, the Commission has determined that it should team with the Michigan Agency for Energy (MAE) and the National Governor's Association (NGA) to expand the conference to include examining compressed natural gas (CNG) issues and its use as a motor vehicle fuel. Other state agencies, including the Michigan Economic Development Corporation (MEDC), the Michigan Department of Transportation (MDOT), and the Department of Environmental Quality (MDEQ) will be invited given their potential involvement or interest in PEV and CNG programs.

PEV and CNG issues face many of the same questions regarding availability of infrastructure to refuel vehicles and the potential costs, benefits, and risks involved if regulated utilities attempt to fill that gap. Auto manufacturers in Michigan, developers, and third-party providers in many

instances have separate programs for these two alternate fuel programs. While the Commission is focused on issues that need to be addressed by the regulated utilities, MAE will focus on bringing together other governmental and private entities that may have additional roles that could be affected by decisions in the regulatory context.

The focus of both portions of the technical conference will be on the question of what kind of economic conditions would need to exist for the deployment of charging or fueling infrastructure for alternative fuel vehicles by regulated utilities. Specifically, the question to be answered in both contexts is to generate information regarding when use of ratepayer dollars for such investments would result in a ratepayer benefit, and over what period of time that would be realized.

In order to answer this question, the Commission believes that three additional issues should be addressed: (1) what technology is available for PEV charging stations and devices and CNG refueling stations; (2) what role the Commission should take in developing policies applicable to rate regulated electric utilities in the state; and (3) how should the Commission and other governmental agencies interact with the auto industry, the utilities, and other stakeholders in looking at possible future programs? The Commission proposes to schedule and host a one-day meeting in Lansing that will include panel discussions on these topical issues.

Information gained from the meeting will be extremely useful to Commission planning because of the questions to be faced regarding the role for regulated utilities in expanding alternative fueled vehicle infrastructure in the form of charging stations for electric cars. In addition, there have been policy discussions regarding CNG fueling station deployment and therefore it is possible similar questions will arise in that context. As such, broad stakeholder participation is encouraged in the technical conference.

It is currently the Commission's intent to make optimal use of panel discussions during the one-day technical conference, which will be held at the Commission's Lansing offices during the first full week of August 2017.¹ The Commission envisions that the majority of the efforts to be undertaken at the technical conference will take place through reliance on panel discussions as described further below.

Panel One

The first panel will address the current state-of-the-art and likely future technology path of PEV charging. It will include discussion from pertinent segments of the PEV industry, including auto manufacturers, PEV owners, charging station manufacturers and network owners and operators. The selected panelists will be encouraged to address, but not limit their views, to the following:

- What is the “lay of the land” for existing PEV technology?
- How is “range anxiety” being addressed by the various industry sectors?
- How will PEV charging technology evolve as new vehicle models are introduced and PEV market penetration increases? The discussion should include specific technology issues related to new standards for high kilowatt fast-charging.
- Does Level 1 charging have a future role for PEVs considering that 120 volt outlets are low-cost and ubiquitous?
- Do high-capacity battery/high-range PEVs render obsolete prior Level 2 “opportunity” (public) charging deployment schemes, and if so, where should future deployment of Level 2 public charging stations be focused?
- What is a reasonable time frame for fast-charging networks to be deployed in Michigan?
- Can a balanced rate-of-deployment of fast-charging networks in Michigan be accomplished so that range anxiety is adequately addressed, the purchase of PEVs

¹ The Commission is targeting the technical conference for either August 8, 9, or 10, 2017. As the details of the technical conference come into better focus, the Commission's Executive Secretary will make them available to the public via its website.

is encouraged, and technological obsolescence (and stranded assets associated with fast-charge investment) is minimized?

- What usage would be expected from Level 1 and 2 charging stations, and at what point would expected costs be recouped via sales? Are there alternative models that would provide more ratepayer value?
- What are the advantages and disadvantages of relying primarily on public utilities for the deployment of PEV charging stations?
- What is the likely future level of private sector financial investment in PEV charging infrastructure over the next 5, 10, and 15 years?
- What role will vehicle manufacturers take in investing in the technology for PEV charging and related future infrastructure buildout?

Panel Two

The second panel will address the role of utilities in reducing/eliminating market barriers to deployment of PEV charging stations or CNG fueling stations and maximizing benefits that accrue to all electric customers or gas customers by increasing the penetration of alternative fuel vehicles.

These panelists will be encouraged to address, but not limit their views, to the following:

- What approaches are other states pursuing with respect to reducing market barriers in the deployment of residential and public charging stations and what are the pros and cons if Michigan were to adopt components of these approaches? Discussion should include ratepayer-funded consumer rebates, utility ownership and rate-basing of PEV charging and CNG refueling infrastructure, the “make ready” model, and equity issues associated with low-income communities.
- What is the impact of financial rebates on PEV sales and market penetration and is there a utility business case for providing such rebates? Are there financial incentives that should be considered to enhance deployment of CNG vehicles?
- Whether and how should the Commission accelerate the deployment of smart and connected residential and public PEV charging stations that allow for active and passive load management by utilities?
- Will promotion by utilities of daytime PEV charging at office and factory buildings significantly improve PEV vehicle market-penetration, and can such a policy be accomplished without detriment to Michigan electric utility operations?

Panel Three

Finally, a third panel will focus on the appropriate role for the Commission in developing alternative fuel vehicle policies related to investments by regulated utilities. Members of the third panel will include the Commission, representatives from the utilities, customer groups and other stakeholders including participants in Case No. U-17990. This panel discussion will address, but not limit their views, to the following:

- How should the Commission address electric utility rate and cost-of-service issues associated with charging of PEVs? How should the Commission identify regulatory changes that will encourage increased use of CNG as a motor vehicle fuel?
- How should the Commission address time-of-use, dynamic pricing, and on peak/off peak usage related to charging PEVs? Are there other utility tariff and pricing revisions that, if adopted, will enhance the deployment of PEV charging stations?
- Could the Commission mitigate issues related to both siting obsolescence and technological obsolescence of EV charging infrastructure that has been funded in full or in part by electric utility customers?
- Does the CNG industry need natural gas customer support in deploying additional compressor and refueling stations in Michigan? If it is not needed, could there still be a role resulting in ratepayer benefit of allowing regulated utilities to invest in such stations, and should that be permitted?
- How are utility sale-for-resale restrictions impacting the competitive market for EV charging? Is per kilowatt-hour pricing a critical component of future competitive PEV charging markets?
- How can Michigan create a nexus between private investments in charging station infrastructure so that multi-source funding is leveraged to maximize impact?

Any person may submit written or electronic comments or a letter of interest regarding the development of regulatory approaches or guidance pertaining to the deployment of plug-in electric vehicle charging facilities and/or concerning issues germane to the use of compressed natural gas as a motor vehicle transportation fuel. Such comments and letters shall be filed with the

Commission and must be received no later than 5:00 p.m. on July 31, 2017, to be timely. Written comments or letters should be sent to: Executive Secretary, Michigan Public Service Commission, P.O. Box 30221, Lansing, MI 48909. Electronic comments or letters may be e-mailed to mpscdockets@michigan.gov. All comments and letters should reference Case No. U-18368. All information submitted to the Commission in this matter will become public information available on the Commission's website and subject to disclosure.

THEREFORE IT IS ORDERED that:

A. The Commission's Executive Secretary shall open this docket to serve as the repository of all information pertaining to the technical conference and collaborative efforts to examine and develop policies pertaining to the deployment of plug-in electric vehicle charging facilities and to examine issues germane to the use of compressed natural gas as a motor vehicle transportation fuel.

B. The Commission's Executive Secretary shall electronically serve copies of this order on all electric and gas utilities regulated by the Commission, the parties in Case Nos. U-17990 and U-18014, the former Michigan Electric Vehicle workgroup stakeholders, representatives of the Michigan Agency for Energy, the National Governor's Association, the Michigan Economic Development Corporation, the Michigan Department of Transportation, the Michigan Department of Environmental Quality, and on all subscribers to Commission's own motion dockets.

C. Any person may submit comments or a letter of interest regarding the development of regulatory approaches or guidance pertaining to the deployment of plug-in electric vehicle charging facilities and/or concerning issues germane to the use of compressed natural gas as a motor vehicle transportation fuel by 5:00 p.m. on July 31, 2017, in accordance with the instructions set forth in the body of this order.

D. The Commission's Executive Secretary shall post a Notice of Technical Conference in this docket and electronically serve such notice on the interested persons described in Ordering Paragraph "B" of this order and on any interested person who submits a comment or files a letter indicating the person's intent to participate in the technical conference to be held in August 2017.

E. Any person interested in volunteering to participate as a panelist at the technical conference shall submit a letter of interest, a curriculum vitae, and a brief summary of the topics which the person will be prepared to discuss to Al Freeman at 7109 W. Saginaw Hwy, Lansing, Michigan 48917 by July 21, 2017, or may send the requested information to Mr. Freeman at freemana5@michigan.gov.

The Commission reserves jurisdiction and may issue further orders as necessary.

MICHIGAN PUBLIC SERVICE COMMISSION

Sally A. Talberg, Chairman

Norman J. Saari, Commissioner

Rachael A. Eubanks, Commissioner

By its action of April 28, 2017.

Kavita Kale, Executive Secretary